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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/084,774 | 02/26/2002 | Paul Gothard Knutson | PU020046 | 1807 |

7590 12/29/2006
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| EXAMINER |
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NGUYEN, TU X

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| ART UNIT | PAPER NUMBER |
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2618

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
|--|------------|---------------|
| 3 MONTHS | 12/29/2006 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/084,774

Applicant(s)

KNUTSON ET AL.

Examiner

Tu X. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-9 and 11-15 is/are rejected.
- 7) ☒ Claim(s) 5 and 10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 2/26/02 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 9/29/06 have been fully considered but they are not persuasive.

Regarding claim 1, in response to Applicant argument Sadao does not disclose first block downconverted satellite, tuning circuitry and oscillator circuitry. Sadao disclose block downconverted (see par.004 lines 3-6, "the 1st frequency mixer 203 changed into the 1st intermediate frequency signal of a 1GHZ from 12GHZ band of the satellite broadcasting electric-wave"), a tuning circuitry (see par.017, lines 11-12, "this phase-locked loop 214, the error signal according to channel selection information" corresponds to "tuning circuit"), oscillator circuit (see par.017, lines 11-12, oscillator 213).

Applicant argue Sado does not suggest remotely oscillator circuitry; however, "remotely" is not in claimed in the claim limitations.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 6-9 and 11-15, are rejected under 35 U.S.C. 102(e) as being anticipate by Yaguchi Sadao (JP 11-112376).

Regarding claim 1, Yaguchi disclose an outdoor unit of a satellite television ground system comprising:

converter circuitry (see fig.1, 200)operative to receive a first satellite television signal and to block down convert the first satellite television signal;

coarse tuning circuitry (see 214, fig.1, and abstract) in communication with said converter circuitry and operative to coarse tune the first block downconverted satellite television signal; and

oscillator circuitry (see 213, fig.1) in communication with said converter circuitry and said coarse tuning circuitry, and operative to generate and provide an oscillator signal to said converter circuitry for block downconverting the first satellite television signal, and to generate and provide the oscillator signal to said coarse tuning circuitry for coarse tuning the first downconverted satellite television signal.

Regarding claims 2, 7, Yaguchi disclose oscillator circuitry comprises a frequency locked oscillator (see 214, fig.1).

Regarding claim 3, Yaguchi disclose everything as claim 1 above; further Yaguchi discloses a first frequency synthesizer (see par.017, PLL corresponds to synthesizer) in communication with said oscillator circuitry and operative to generate a first synthesized signal; a first signal combiner (see par.017, mixer 203 corresponds to "combiner") in communication with said first frequency synthesizer and said converter circuitry, said first signal combiner operative to receive said first block downconverted signal from said converter circuitry and said first synthesized signal from said first frequency synthesizer, and to produce a first combined

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signal; and a filter (see par.016) in communication with said first signal combiner and operative to receive said first combined signal and pass a first coarse tuned signal therefrom.

Regarding claims 4 and 9, Yaguchi discloses said converter circuitry is operative to separately receive and block downconvert first and second satellite television signals, and said coarse tuning circuitry is operative to separately course tune the first and second satellite television signals (see par.017).

Regarding claim 6, Yaguchi disclose an outdoor unit for a satellite television ground system comprising:

means for receiving and block downconverting a first satellite television signal (see 200, fig.1);

means, in communication with said means for receiving and block downconverting a first satellite television signal, for coarse tuning (see 214, fig.1) said first block downconverted satellite television signal; and

means for generating and providing an oscillator signal (see 213, fig.1) to said means for block downconverting a first satellite television signal for block downconverting the first satellite television signal and for generating and providing the oscillator signal to said means for coarse tuning said first block downconverted satellite television signal for coarse tuning the first downconverted satellite television signal.

Regarding claim 8, Yaguchi discloses means for coarse tuning said first block downconverted satellite television signal comprises: means, in communication with said means for generating and providing an oscillator signal, for generating a first frequency synthesized signal from said oscillator signal; means, in communication with said means for generating a

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first frequency synthesized signal and said means for block down converting a first satellite television signal, for combining said first frequency synthesized signal with said first block downconverted satellite television signal, and to produce a first combined signal therefrom; and means, in communication with said means for combining, for filtering a coarse tuned signal from said combined signal (see par.004).

Regarding claim 11, Yaguchi disclose an outdoor unit of a satellite television ground system, a method of processing a satellite television signal comprising the steps of:

- receiving a first satellite television signal (see abstract);
- block downconverting the first satellite television signal (see 200);
- coarse tuning (see 214) the first block downconverted satellite television signal;
- generating an oscillator signal (see 213); and
- utilizing the oscillator for block downconverting and coarse tuning the first satellite television signal (see 200).

Regarding claim 12, Yaguchi disclose the step of block downconverting the first satellite television signal includes the steps of: generating a frequency multiplier signal (see par.017, mixer corresponds to multiplier); combining the frequency multiplier signal with the first satellite television signal; and filtering the combined signal to obtain the block downconverted satellite television signal; and the step of coarse tuning the first block downconverted satellite television signal includes the steps of: generating a frequency synthesizer signal; combining the frequency synthesizer signal with the block downconverted satellite television signal; and filtering the combined signal to obtain the coarse tuned satellite television signal (see par.016-017).

Regarding claims 13-14, Yaguchi disclose receiving a second satellite television signal (see abstract, "operation of a channel selection" corresponds to "second satellite signal"); block downconverting (see 200, fig.1) the second satellite television signal; coarse tuning the second block downconverted satellite television signal (see 214, fig.1); and
utilizing the oscillator (see 213, fig.1) for block downconverting and coarse tuning the second satellite television signal.

Regarding claim 15, Yaguchi discloses receiving a master oscillator signal (see abstract, "operation of a channel selection" corresponds to "second satellite signal) from an indoor unit of the satellite ground system; and utilizing the master oscillator signal to generate the oscillator (see 214, fig.1).

Allowable Subject Matter

Claims 5 and 10 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding dependent claim 5, the prior arts fail to teach "a second frequency synthesizer in communication with said oscillator circuitry and operative to generate a second synthesized signal; a second signal combiner in communication with said second frequency synthesizer and said converter circuitry, said second signal combiner operative to receive said second block downconverted signal from said converter circuitry and said second synthesized signal from

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said second frequency synthesizer, and to produce a second combined signal; and a second filter in communication with said second signal combiner and operative to receive said second combined signal and pass a second coarse tuned signal therefrom", as cited in the claim.

Regarding dependent claim 10, the prior arts fail to teach "means, in communication with said means for generating and providing an oscillator signal, for generating a second frequency synthesized signal from said oscillator signal; means, in communication with said means for generating a second frequency synthesized signal and said means for downconverting, for combining said second synthesized signal with said second block downconverted satellite television signal, and to produce a second combined signal therefrom; and means, in communication with said means for combining, for filtering a second coarse tuned signal from said second combined signal", as cited in the claim.

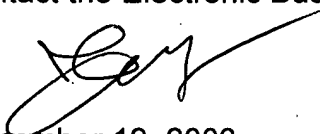
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tu Nguyen whose telephone number is 571-272-7883.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban, can be reached at (571) 272-7899. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to be 'J. G. Y.', is written over the date.

December 19, 2006